

Appl. No.: 10/521,822
Reply to Office Action of: 07/05/2006

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A coupling antenna comprising ~~at least one~~ a single loop present on a support, the loop including a first and a second contact zone, and the single loop being connected to a capacitor present on ~~this same~~ the support, the capacitor being mounted in parallel on ~~both the first and the second~~ the first and the second contact zones of the antenna, ~~characterized in that wherein the antenna~~ single loop and the capacitor are printed by gravure printing on the same support.
2. (Currently amended) The antenna according to claim 1, ~~further characterized in that wherein the antenna comprises a single loop and is~~ tuned to a medium-frequency carrier wave for transmission and reception.
3. (Previously presented) The antenna according to claim 1, further characterized in that the antenna is tuned for a frequency of around 13.56 MHz.

Appl. No.: 10/521,822
Reply to Office Action of: 07/05/2006

4. (Previously presented) The antenna according to claim 1, further characterized in that an insulating thickness between two electrodes of the flat capacitor is less than 10 micrometers.

5. (Previously presented) The antenna according to claim 1, further characterized in that it is connected to an electronic chip.

6. (Previously presented) A production process for an antenna comprising at least one loop connected to a capacitor, the antenna and the capacitor being present on the same insulating support, characterized in that it comprises the following steps:

- creating a first gravure printing of a conductive ink in order to obtain an open loop of the antenna, a lower electrode of the capacitor, and a connection between a first contact zone of the antenna and the lower electrode,
- creating a second printing by gravure printing with a dielectric ink to cover the lower electrode with an insulating film,

Appl No.: 10/521,822
Reply to Office Action of: 07/05/2006

- creating a third printing by gravure printing with a conductive ink to obtain an upper electrode for the capacitor covering the insulating film, and to obtain a connection between a second contact zone of the antenna and the upper electrode.

7. (Previously presented) The process according to claim 6, further characterized in that the insulating film is obtained by successive deposition of two dielectric ink layers printed by gravure printing.

8. (Previously presented) The process according to claim 6, further characterized in that it comprises a final step consisting of:

- depositing a metallized film by electrolysis onto the conductive ink layers belonging to the open loop of the antenna, the connection between the first contact zone of the antenna and the lower electrode, the upper electrode and the connection between the second contact zone of the antenna and this upper electrode.

9. (Previously presented) The process according to claim 6, further characterized in that the surface of the capacitor to

Appl. No.: 10/521,822
Reply to Office Action of: 07/05/2006

be printed by gravure printing is determined as a function of the thickness of the dielectric layer that can be deposited during the second printing.

10. (Previously presented) The process according to claim 6, further characterized in that the two contact zones of the antenna are directly connected to an electronic chip with which the antenna cooperates.

11. (New) A radio frequency identification (RFID) tag comprising:

a first insulating support;

a single loop antenna formed on a surface of the first insulating support and including a first and a second contact zone, the first contact zone being connected to a lower electrode;

a second insulating film positioned on top of the lower electrode; and

an upper electrode formed on top of the insulating film and connected to the second contact zone, wherein the single loop antenna, the lower electrode, the upper electrode, and the second insulating film are printed by gravure printing.